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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,846	07/25/2003	Nobuaki Naoi	62758-044	9285

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MCDERMOTT WILL & EMERY LLP  
600 13TH STREET, N.W.  
WASHINGTON, DC 20005-3096

EXAMINER
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HSIA, SHERRIE Y

ART UNIT	PAPER NUMBER
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2622

MAIL DATE	DELIVERY MODE
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09/25/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/626,846

**Applicant(s)**

NAOI ET AL.

**Examiner**

Sherrie Hsia

**Art Unit**

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 4/30/04, 7/25/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Specification*

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
3. The lengthy specification has not been fully checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

4. The disclosure is objected to because of the following informalities:

On page 1, line 12, "setout" should be --setup--;

Line 13, "at" should be --a--

On page 2, line 19 and 21, "potable" should be --portable--.

On page 4 line 4 and page 7 line 19, "multiplied" should be --multiplexed--.

On page 11, line 19, "flush" should be --flash--.

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On page 14, lines 12-13, “a number larger than 1” should be --1 or larger--.

Appropriate correction is required.

### ***Drawings***

5. The drawings are objected to because in Fig. 2, “flush” should be --flash--. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

6. Claims 7, 8 and 15 are objected to because of the following informalities:

In claim 7 line 4, “the digital broadcast signal” should be --a digital broadcast signal--.

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In claim 8 line 2, "in" should be --into a--.

In claim 15, lines 2 and 4, after "OSD", --generator-- should be inserted.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

As to claim 1, the channel set-up method of the invention appears to be a two-stage process. In the first stage, the apparatus steps up through all the physical channels and registers information about those channels which contain broadcast signals. In the second stage, the apparatus steps up through only those channels which have not been registered as containing broadcast signals, leading to a faster search. Independent claim 16 reflects the two-stage process. However, **claim 1 (lines 9 - 14) requires (a?) setup operation in which channels are scanned and broadcast information is stored. The claim continues 'wherein the setupper skips channels having broadcast signals the existence of which is stored in memory during scanning in the channel set-up operation'. The wording of this passage does not appear to be quite correct; the claim appears to refer to a single scan, although it is then unclear how**

**the information is initially stored.** Amendment is necessary to improve clarity and to ensure support, and to ensure unity of invention with claim 16.

In claim 2, it claims 'channel up-down tuner'. In itself, this term is not really unclear, although there is no apparent practical difference between an 'up-down tuner' and simply 'a tuner'. However, the meaning of 'up-down' could be open to doubt later in the claim, which says 'when the channel is up-down tuned successively'. This could refer to both up and down directions of scanning, but Figs. 1 & 7 appear to show that, when tuning, the physical channel number starts at minimum (S102) and is always incremented (S112) until a maximum is reached (S 111). Similar considerations apply to independent claim 16. Amendment therefore appears necessary to ensure clarity, and to ensure that claims 2 and 16 are properly supported.

Note: the expression 'up-down tuning' also occurs on p. 14 and elsewhere; also, p.16 says (ln.18) 'when the channel is to be up '. Revision appears necessary.

In claims 10, 11 and 12, the term 'accuracy' is not clear. The text (page 19 line 15 - 25) which is perhaps intended to support these claims indicates that the period of time allowed for channel detection may be increased in successive channel scans, so that the chance of missed detection is reduced. Correction is required.

In claim 16, it indicates that channels being 'continuously' scanned which is not entirely clear. General revision of all such terms appears desirable, to ensure that they are clear and that claims are supported by the description.

Note: the second part of claim 16, which requires a second step in which channels are scanned 'with skipping channels stored...' (skipping those channels previously stored?) could also benefit from textual revision.

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***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

De Vilbiss (4737993) discloses a cable broadcast TV receiver with automatic channel search responsive to mode change.

Tults (4763195) shows a television tuning system with provisions for quickly locating active cable channels.

Testin (4776038) discloses an automatic AIR/Cable mode selection apparatus for a television tuner.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherrie Hsia whose telephone number is (571) 272-7347.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**Any response to this action should be mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

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**Or faxed to:**

**(571) 273-8300**

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service Office whose telephone number is (571) 272-1000.



**Sherrie Hsia  
Primary Examiner  
Art Unit 2622**

SH  
September 17, 2007